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EXAMINER

DYKE, KERRI M

ART UNIT

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2667

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/036,001	Applicant(s) WU ET AL.	
	Examiner Kerri M. Dyke	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 3,6,7 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 3 and 6-7 are objected to because of the following informalities: The colon is missing before the beginning of each list. Appropriate correction is required.
2. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 10 recites the limitation of collecting workload data from the proxy servers. It is objected to because claim 8 recites the limitation of polling for workload data from the proxy servers. Both collecting and polling are synonyms for asking or soliciting. Claims 8 and 10 both recite the same limitation of asking for the proxy servers to report their workload data, thus claim 10 fails to further limit because the limitation on the parent claim is already recited in claim 8.

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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3. Claims 1 and 2 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 15 of copending Application No. 10/036,024. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 3-7, 14, and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-10 and 14 of copending Application No. 10/036,024. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art to have at least two VoIP clients instead of at least one VoIP client.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

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patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ma et al. (US 6,795,867).

8. In regards to claim 1, Ma et al. discloses a Voice-over-Internet Protocol (VoIP) system, comprising: a network including at least two VoIP proxy servers configured to allow voice data to be transmitted and received over the network; at least one VoIP client operatively coupled to the network to transmit and receive voice data over the network; and a load monitor device configured to monitor workload on the at least two VoIP proxy servers and determine an identity of the VoIP proxy server with a lowest workload, and to provide the identity of the VoIP proxy server with the lowest workload to the at least one VoIP client so that the at least one VoIP client can connect to the VoIP proxy server with the lowest workload to transmit and receive voice data. Figure 1 shows a network with multiple VoIP proxy servers and clients. The clients include the phones 112, 114, 116, and 118. The proxy servers are marked as gateways and included elements 104 and 106. It is well known to those in the art that gateways are also known to be proxy servers. The gatekeepers, 108 and 109, are equipped with load management units (LMU). Figure 4 is a flow diagram of the load balancing invention disclosed by Ma et al. The description of figure 4 begins on line 41 of column 8 and continues to line 8 of column 9.

9. In regards to claim 2, Ma et al. discloses the VoIP system according to claim 1, wherein the at least one VoIP client is at least two VoIP clients operatively coupled to the network to transmit and receive voice data over the network; and wherein the load monitor device provides the identity of the VoIP proxy server with the lowest workload to one of the at least two VoIP

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clients so that the one of the at least two VoIP clients can connect to the VoIP proxy server with the lowest workload in order to transmit and receive voice data in relation to another of the at least two VoIP clients. Figure 1 shows at least two VoIP clients. Column 6 lines 10-24 disclose that the LMU determines which proxy server has the lowest workload then directs the requesting client to connect through that proxy server. Figure 4 and column 8 line 41- column 9 line 9 also provide an explanation of how the LMU works.

10. In regards to claim 3, Ma et al. discloses the VoIP system according to claim 1, wherein the network comprises one or more of a proprietary network, a network of leased facilities, the Internet, an Intranet, a wide-area network (WAN), a Local-area network (LAN) and a virtual private network (VPN). Figure 1 element 124 discloses using a LAN or WAN. Figure 1 element 102 discloses using an IP network, which is well known in the art to include the Internet and Intranets.

11. In regards to claim 4, Ma et al. discloses the VOIP system according to claim 1, wherein the load monitor device provides the identity of the VoIP proxy server with the lowest workload to the at least one VoIP client in response to a client query from the at least one VoIP client. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints. It is also disclosed there that the calling endpoint is provided with the identity of the server with the lowest workload, through which the requested call will be setup.

12. In regards to claim 5, Ma et al. discloses the VOIP system according to claim 1, further including the at least one VoIP client coupled to a gateway coupled to the network wherein the gateway controls access to the network. Figure 1 elements 104 and 106 are gateways.

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13. In regards to claim 6, Ma et al. discloses the VoIP system according to claim 5, wherein the gateway comprises one or more of a VoIP gateway, a VoIP PTSN gateway, a media gateway, a router and an H.323 gateway. Column 5 lines 8-17 disclose the functions of the gateway, which includes a VoIP PSTN gateway and a media gateway. H.320 and H.324 are protocols for video links, which are media. Therefore, the gateway is a media gateway. Figure 2 shows the use of routers and gateways. The system is also capable of handling H.323 calls, as disclosed in column 5 line 21.

14. In regards to claim 7, Ma et al. discloses the VoIP system according to claim 1, wherein the at least one VoIP client comprises one or more of an IP phone, a plain old telephone system (POTS) phone, a cell phone, a satellite phone, a microphone, a computer video camera with a microphone and a multi-media computer configured to transmit and receive voice data. Figure 1 elements 112, 114, 116, 118, and 122 shows IP phones and computers as endpoints. The endpoints are described in more detail in column 3 line 50 – column 4 line 64.

15. In regards to claim 8, Ma et al. discloses the VoIP system according to claim 1, wherein the load monitor device periodically polls the at least two VoIP proxy servers for workload data. Column 9 lines 34-36 discloses that the LMU periodically polls the servers for workload data.

16. In regards to claim 9, Ma et al. discloses the VoIP system according to claim 1, wherein the at least two VoIP proxy servers spontaneously report workload data to the load monitor device. Column 9 lines 31-33 disclose that the proxy servers spontaneously report workload data to the load monitor.

17. In regards to claim 10, Ma et al. discloses the VoIP system according to claim 1, wherein the load monitor device is programmed to collect workload data from the at least two VoIP

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proxy servers. Column 9 lines 34-37 discloses that the LMU periodically polls the servers to report the collected workload data.

18. In regards to claim 12, Ma et al. discloses the VoIP system according to claim 1, wherein the load monitor device is programmed to collect workload data from the at least two VoIP proxy servers upon receipt of a client query from the at least one VoIP client. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints.

19. In regards to claim 13, Ma et al. discloses the VoIP system according to claim 1, wherein the at least one VoIP client connects to the VOIP proxy server with the lowest workload to transmit and receive video data. Column 4 lines 43-44 disclose that the both audio and video data can be exchanged. The overall invention described by Ma et al. is a method for using the server with the lowest workload in order to achieve balanced network loading. It is therefore inherent that the server with the lowest workload would be chosen for transmission of data, regardless of whether it is audio or video.

20. In regards to claim 14, Ma et al. discloses a method for connecting at least one Voice-over-Internet Protocol (VoIP) client to a VoIP system, wherein the VoIP system comprises a network of at least two VoIP proxy servers, a load monitor device and a VoIP proxy server has a lowest workload; comprising the steps of: (a) monitoring the at least two VoIP proxy servers for an indication of workload; (b) identifying which VOIP proxy server has the lowest workload; and (c) connecting of the at least one VOIP client to the VOIP proxy server with the lowest workload in order to transmit and receive voice data. Figure 1 shows a network with multiple VoIP proxy servers and clients. The clients include the phones 112, 114, 116, and 118. The

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proxy servers are marked as gateways and included elements 104 and 106. It is well known to those in the art that gateways are also known to be proxy servers. The gatekeepers, 108 and 109, are equipped with load management units (LMU). Figure 4 is a flow diagram of the load balancing invention disclosed by Ma et al. The description of figure 4 begins on line 41 of column 8 and continues to line 8 of column 9. Column 6 lines 11-12 disclose that Gatekeeper is chosen to service a call using a method of determination. Column 9 lines 29-36 describe the determination of which has the lowest workload in more detail.

21. In regards to claim 15, Ma et al. discloses the method of claim 14, wherein the VoIP system includes at least two VoIP clients, and further includes the step of connecting of one of the at least two VoIP clients to the VoIP proxy server with the lowest workload in order to transmit and receive voice data in relation to another of the at least two VOIP clients. Figure 1 discloses at least two VoIP clients. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints. It is also disclosed there that the calling endpoint is provided with the identity of the server with the lowest workload, through which the requested call will be setup. The use of voice or video data is disclosed in column 4 lines 43-44, but is also inherent by the inclusion of telephones in figures 1 and 2.

22. In regards to claim 16, Ma et al. discloses the method of claim 14, further including the step of providing an identity of the VoIP proxy server with the lowest workload to the at least one VoIP client. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints. It is also

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disclosed there that the calling endpoint is provided with the identity of the server with the lowest workload, through which the requested call will be setup.

23. In regards to claim 17, Ma et al. discloses the method of claim 14, further including the step of receiving a client query by a load monitor device from the at least one VoIP client to identify the VoIP proxy server with the lowest workload. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints. It is also disclosed there that the calling endpoint is provided with the identity of the server with the lowest workload, through which the requested call will be setup.

24. In regards to claim 18, Ma et al. discloses the method of claim 14, further including the step of polling periodically by a load monitor device the at least two VoIP proxy servers for workload data. Column 9 lines 34-37 discloses that the LMU periodically polls the servers to report the collected workload data.

25. In regards to claim 19, Ma et al. discloses the method of claim 14, further including the step of receiving spontaneous reports on workload data by a load monitor device from the at least two VoIP proxy servers. Column 9 lines 31-33 disclose that the proxy servers spontaneously report workload data to the load monitor.

26. In regards to claim 21, Ma et al. discloses the method of claim 14, further including the step of responding to a client query from the at least one VoIP client by a load monitor device with the identity of the VoIP proxy server with the lowest workload. Column 5 line 63 – column 6 line 12 discloses that the LMU determines which server to use in response to a query for call setup from one of the client endpoints. It is also disclosed there that the calling endpoint is

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provided with the identity of the server with the lowest workload, through which the requested call will be setup.

27. In regards to claim 22, Ma et al. discloses the method of claim 14, further including the step of transmitting and receiving voice and video data. Column 4 lines 43-44 disclose that the invention can be used for voice and video transmission/reception.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 6,795,867) in view of O'Neil et al. (US 6,128,279).

30. In regards to claims 11 and 20, Ma et al. discloses the VoIP system according to claims 1 and 14, wherein the load monitor device is programmed to collect workload data from the at least two VoIP proxy servers, but not where the monitoring is continuous.

O'Neil et al. discloses a load monitoring system with continuous monitoring and exchanging of information in column 6 lines 42-43.

It would have been obvious to one of ordinary skill in the art to modify the monitoring system of Ma et al. to allow for continuous monitoring as taught by O'Neil because then the load information is instantly available for comparison and determination of the server with the lowest load, as disclosed by O'Neil in column 6 lines 43-44.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Sitaraman et al. (US 6,442,165) discloses a method for load balancing in a VoIP network.
- b. Bhaskaran et al. (US 6,601,084) discloses a load balancing system for networks such as the Internet, an intranet, LAN, or WAN. The load balancing system uses continuous examination to determine which server has the lowest load.
- c. He et al. (US 6,671,259) discloses a WAN/LAN load balancing system.
- d. Havens (US 6,947,385) discloses a VoIP load balancing system.
- e. Trethewey (US 2003/0056002) discloses a VoIP load balancing system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 8:10 am - 4:15 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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9/30/05